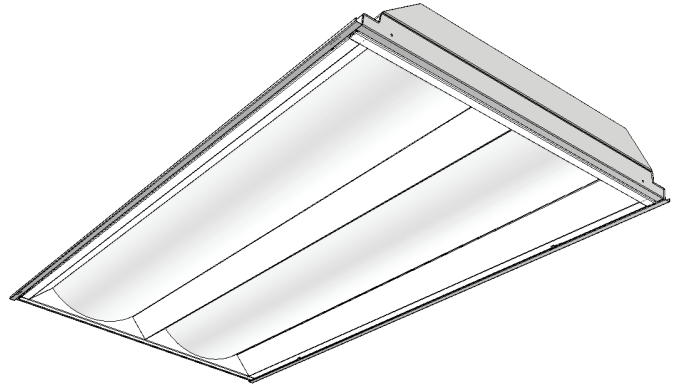
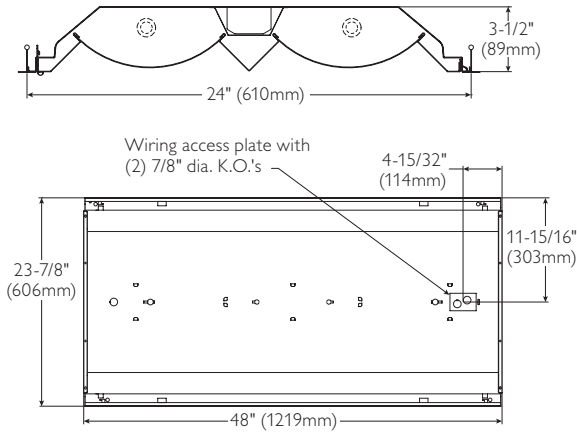


# Opalescent Twin

## Recessed 2'X4' Fluorescent, T8, T5 or T5HO



### Ordering Information

Opalescent Twin	Body Style	Fixture Width	Ceiling Type	Lens Type	Lamp Qty.	Lamps (by others)	Voltage	Ballast Type	Options
<b>OT</b> Recessed Fluorescent	<b>S</b> = Static	<b>2</b> = 24" (Nominal Size)	<b>G</b> = Standard Grid	<b>PR</b> = Frost acrylic linear ribbed lens	<b>2</b> = 2 Lamps	<b>28</b> = T5 4' Length <b>32</b> = T8 4' Length <b>54</b> = T5HO 4' Length (Nominal 48")	<b>120</b> = 120v <b>277</b> = 277v <b>UNV</b> = 120-277v		Add appropriate suffix to catalog no., i.e.: <b>(C)</b>
									<10THD <b>PG</b> <b>VY</b> <b>PF</b> <b>HI</b> <b>P2</b> <b>V2</b> <b>PS</b>

Note: For T8 UNV, you must use HI Ballast Code.

### Features

- Soft balanced brightness with high efficiency.
- Dual channel 1-5/8" regressed frame with contoured lenses.
- High light transmission DR frost acrylic linear ribbed lenses.
- Shallow low profile 3-1/2" deep housing.
- Precision fit door frame prevents light leak.
- 85.1% efficient 32 watt 2 lamp T8.
- 89.8% efficient 28 watt 2 lamp T5.
- Ballast accessible from room side.
- Ribbed housing for strength and stability.
- Ends of housing formed inward for safe handling.
- Built-in earthquake clips.
- Internal door frame "T" hinges allows easy installation and maintenance.
- Rooster head spring latches.
- Suitable for continuous row mounting.

Job Information	Type:
Job Name:	
Cat. No.:	
Notes:	

**PHILIPS**  
**LIGHTOLIER**

# Opalescent Twin

## Recessed 2'X4' Fluorescent, T8, T5 or T5HO

Page 2 of 3

### Specifications

**Materials: Chassis Parts**—Die-formed code gauge cold rolled steel. Housing is embossed for added strength and rigidity.

**Finish: Chassis exterior**—white baked polyester enamel.

**Cavity**—white baked polyester enamel minimum 86% reflectance. Rust preventative undercoating.

**Lens: PR**—Dual, frost, DR acrylic linear ribbed lenses.

**Electrical:** Thermally protected class “P” ballast C.B.M. approved, non PCB. If K.O. is within 3" of ballast, use wire suitable for at least 90°.

**Labels:** I.B.E.W. UL and ULc Listed. UL listed for damp locations.

This product may have a mercury containing lamp. Manage in accord with Disposal Laws. See: [www.lamprecycle.org](http://www.lamprecycle.org)

### Options & Accessories

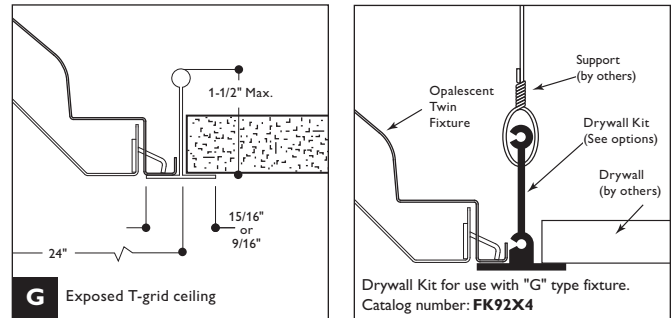
**Electrical Wiring Options:** Consult factory.

**Fusing:** Internal fast blow fusing: Suffix: **A**.  
Internal slow blow fusing: Suffix: **C**.

**Radio Interference Filter:** 120 or 277 volt, 50 or 60 Hz. One per fixture standard. Suffix: **R**. One per ballast. Suffix: **B**.

**Drywall Kit:** Order Catalog Number: **FK92X4**.

### Mounting Methods



Job Information Type:

**PHILIPS**

**LIGHTOLIER**

# Opalescent Twin

## Recessed 2'X4' Fluorescent, T8, T5 or T5HO

### Photometry

#### Model No. OTS2GPR232UNVHI

LER = 77.6 IW = 59.8 BF = 0.88  
Comparative yearly lighting energy cost per  
1000 lumens = \$3.09

Report Number: G2011307

Catalog Number: OTS2GPR232UNVHI

Lamps: (2) F32T8

Opalescent Twin  
Recessed 2' x 4' fixture  
with contoured dual  
lens frame.

Ballast: ICN-2P32-SC

Report is based on 3100 lumens per lamp.

Efficiency: 85.1%

CIE Type: Direct

Plane: 0-Deg. 90-Deg.

Spacing Criteria: 1.2 1.3

Plane: 0-Deg. 90-Deg.

Luminous Length: 45.480 21.480

### Candela Distribution

Vertical Angle	Horizontal Angle			Zonal Lumens
	0	45	90	
0	1963	1963	1963	
5	1957	1953	1955	186
15	1873	1884	1901	532
25	1713	1753	1803	810
35	1483	1567	1658	982
45	1192	1322	1419	1012
55	869	995	1012	861
65	542	587	544	565
75	257	263	232	274
85	48	46	37	56
90	0	0	0	

### Coefficients of Utilization

Ceiling	80%			50%			30%			
	70	50	30	50	30	10	50	30	10	
RC	Zonal Cavity Method									
RW	Effective Floor Reflectance = 20%									
Room Cavity Ratio	1	93	89	86	84	81	79	81	79	77
	2	85	78	73	74	70	66	71	67	64
	3	78	69	62	65	60	56	63	58	55
	4	71	61	54	58	52	48	56	51	47
	5	66	55	47	52	46	41	51	45	41
	6	61	50	42	47	41	36	46	40	36
	7	56	45	38	43	37	32	42	36	32
	8	52	41	34	39	33	29	38	33	29
	9	49	38	31	36	30	26	35	30	26
	10	46	35	28	33	28	23	33	27	23

### Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixt.
0-30	1528	24.6	29.0
0-40	2510	40.5	47.6
0-60	4382	70.7	83.0
0-90	5277	85.1	100.0
90-180	0	0.0	0.0
0-180	5277	85.1	100.0

### Average Luminance data in candela / sq. meter

Angle	0°	45°	90°
45	2674.	2965.	3183.
55	2403.	2751.	2798.
65	2034.	2203.	2042.
75	1575.	1612.	1422.
85	874.	837.	673.

#### Model No. OTS2GPR228UNVPG

LER = 71.8 IW = 65.0 BF = 1.0  
Comparative yearly lighting energy cost per  
1000 lumens = \$3.34

Report Number: G2011305

Catalog Number: OTS2GPR228UNVPG

Lamps: (2) F28T5

Opalescent Twin  
Recessed 2' x 4' fixture  
with contoured dual lens  
frame.

Ballast: 2X28T5UNVPSN

Report is based on 2600 lumens per lamp.

Efficiency: 89.8%

CIE Type: Direct

Plane: 0-Deg. 90-Deg.

Spacing Criteria: 1.2 1.3

Plane: 0-Deg. 90-Deg.

Luminous Length: 45.480 21.480

### Candela Distribution

Vertical Angle	Horizontal Angle			Zonal Lumens
	0	45	90	
0	1744	1744	1744	
5	1739	1736	1737	165
15	1665	1672	1684	473
25	1522	1552	1589	717
35	1316	1382	1453	866
45	1056	1163	1242	890
55	765	879	905	762
65	479	522	488	502
75	227	236	209	245
85	41	41	32	50
90	0	0	0	

### Coefficients of Utilization

Ceiling	80%			50%			30%			
	70	50	30	50	30	10	50	30	10	
RC	Zonal Cavity Method									
RW	Effective Floor Reflectance = 20%									
Room Cavity Ratio	1	98	94	91	88	86	83	85	83	81
	2	90	83	77	78	73	69	75	71	68
	3	82	73	66	69	63	59	66	62	58
	4	75	65	57	61	55	50	59	54	50
	5	69	58	50	55	49	44	53	48	43
	6	64	52	44	50	43	38	48	42	38
	7	59	47	40	45	39	34	44	38	34
	8	55	43	36	41	35	30	40	34	30
	9	52	40	32	38	32	27	37	31	27
	10	48	37	30	35	29	25	34	29	25

### Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixt.
0-30	1354	26.0	29.0
0-40	2220	42.7	47.6
0-60	3872	89.8	82.9
0-90	4668	85.1	100.0
90-180	0	0.0	0.0
0-180	4668	89.8	100.0

### Average Luminance data in candela / sq. meter

Angle	0°	45°	90°
45	2369.	2609.	2786.
55	2115.	2431.	2503.
65	1798.	1959.	1831.
75	1391.	1446.	1281.
85	746.	746.	582.



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OTS2GPR 2X4 November 10, 2011

Specifications are subject to change without notice.  
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**Job Information Type:**